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AN ISO : 9001-2015 CERTIFIED CO.

INDUSTRIAL HEATERS

PRODUCT CATALOG

Furnace Heaters

- Bobbin Heaters
- Bundle Rod Heater
- Edge Wound Heater
- Open Coil and Sinusoidal Strip Heaters

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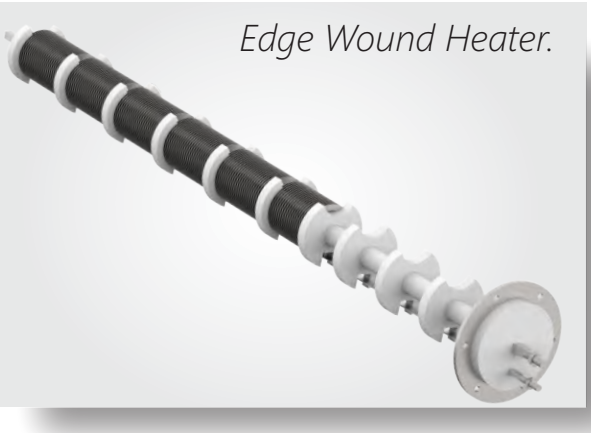
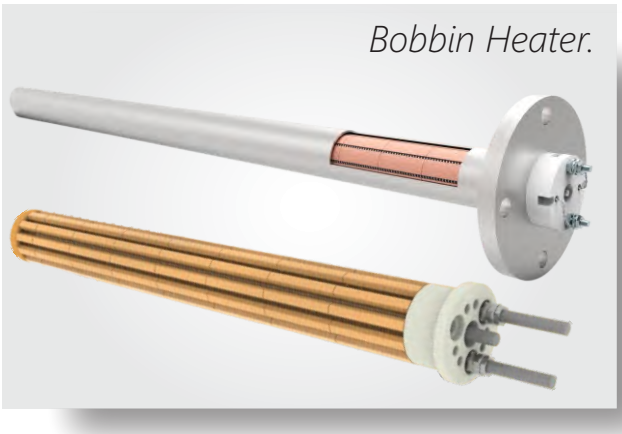
Furance Heaters.

Bundle Road Heater.

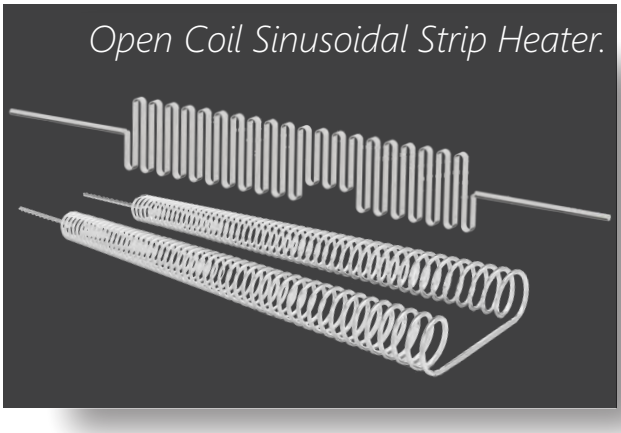
Edge Wound Heater.



Bobbin Heater.



Open Coil Sinusoidal Strip Heater.



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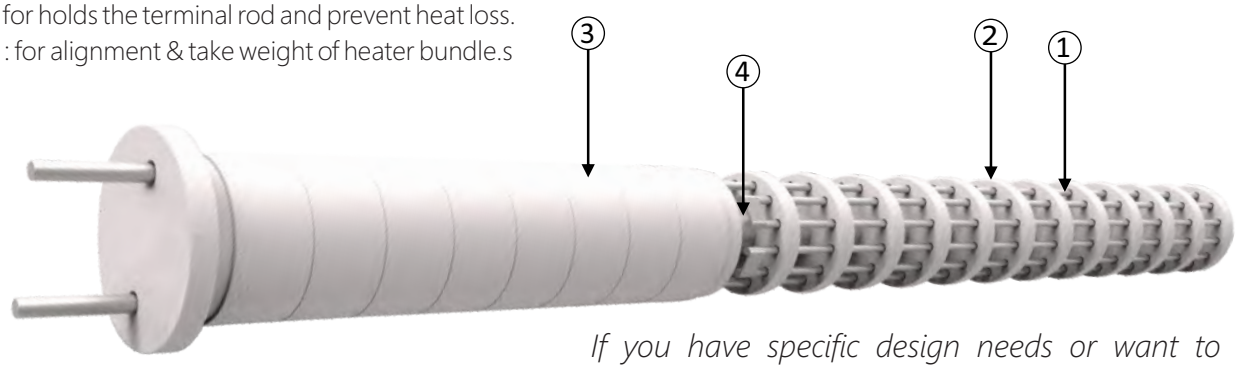
BUNDLE-ROD-Heaters

NOBLEHEAT as the name implies, a bundle rod heater is made up of a round ceramic disk that contains the heating elements. Together with the high-power radiant tubes, prevent refractory corrosion and gas impurities in process materials. These are made to last a long time and require no maintenance. Ferritic alloys up to 1250°C and NiCr alloys up to 1100°C can supply the element.

Construction

1. Direct heating element wire.
2. Ceramic Disc : for hold the heating element & insulation.
3. Fiber Disc : for holds the terminal rod and prevent heat loss.
4. Center rod : for alignment & take weight of heater bundle.s



If you have specific design needs or want to discuss a custom project, please reach out to us.

Technical Details

Power	1 kw to 75 kw
Cold Resistance Tolerance	⩽3%
Heating Element	Ferritic alloy powder metallurgical element, Mara FeCrAl, NiCr 80/20
Watt Density	1 to 10W/cm^2
Temperature	Upto 1250°C
Heater Parameter	Customized Power Rating, Voltage, Resistance, Length, Dia Any Other Dimensions
Fiber Disc	Customized
Ceramic Disc	Flower design, round type, conical type
Ceramic Size	Standard: 70, 80, 95, 110, 124, 154 other customize size available

Benefits

- reduces CO2 emissions by removing flue gases and controlled air in different heat treatment furnaces, preventing burning results or furnace gas corrosion on heating elements.
- Temperature control, assembly, and maintenance are all highly practical, and sealing can be simple.
- High efficiency and powerful heating capability.
- Refractory steel is a cost-effective material.
- either vertical or horizontal mounting.
- less influence on the environment.
- greater technical qualities and a longer operational life.
- greater resistance and surface load.
- devoid of oxide debris.
- Economical price with high output watt density.

Utilization

- primary furnace for melting and storing aluminum.
- The steel industry uses galvanizing furnaces.
- furnace for heat treatment in the automobile sector.
- furnace for annealing.
- furnace for carburizing.

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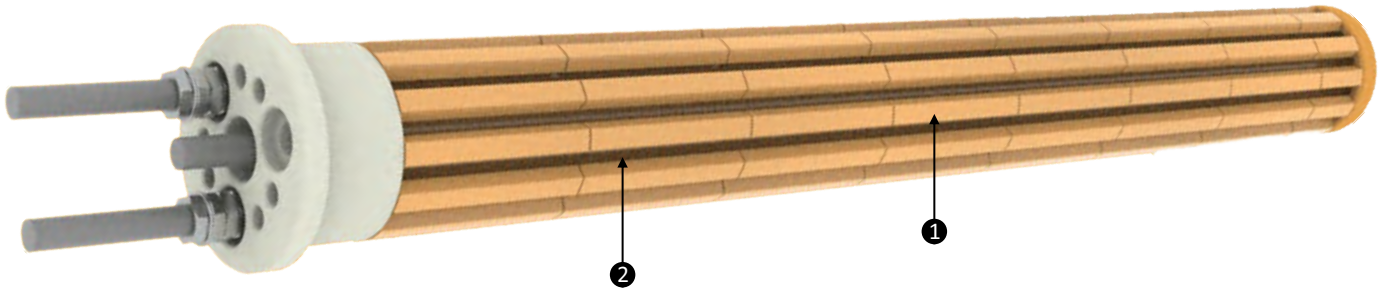
Bobbin-Heaters

NOBLEHEAT create ceramics For any voltage or wattage within manufacturing constraints, bobbin heaters are made from high temperature factory insulators in a range of diameters and lengths. Both sheathed and non-sheathed materials are used to make bobbin warmers.
Stainless steel, Inconel alloys, and mild steel plated with nickel are among the materials used for the sheath. Resistance wires are attached to a terminal block at one end and supported on refractory insulators. For precise temperature sensing, a thermowell or additional controls may be included. Although they can be expressly designed and built for vertical installation, they are typically created for horizontal placement. designed to operate at any voltage or wattage within the parameters of production. The components of these bobbin heaters are partially exposed to the air to improve heat transfer. Additionally, it provides a sizable heated area for the liquid or semi-solid to be heated when placed inside a radiant or immersion tube.

Construction

1. A few blocks of refractory ceramic were put together to reach the necessary length.
2. For optimal longevity, the Nichrome resistance wire heating element is put into the ceramic blocks and uniformly wrapped to distribute heat evenly.



Technical Details

Power	Upto 12kw
Watt density	1 to 10 W/cm^2
Temperature range	Upto 600°C
Heating element	Ferritic alloys wire mara FeCrAl and non ferritic wire NiCr 80-20,NiCr 70-30
Bobbin size	Standard: 25,30,36,42,45,57,93 other customize size available
Heater parameters	Customized – power rating, voltage, resistance, length, diameter and other dimensions
Radiant tube/immersion tube	Stainless steel SS grade,incoloy,cast alloys
Thickness of tube	1.5 to 3mm
Lenght of tube	300 to 2800mm customised
Terminal box	MS, IP 54 standard, IP 66 water proof terminal box
Control	Thermocouple, RTD, thermostat for temperature controlling

Benefits

- Chemicals, water, etc.
- Offer for materials that are semi-solid, such as bitumen, oil, fats, and wax.
- It is appropriate for indirect heating of gases and liquids and can be fixed or replaced by inserting it into a pocket or protective tube in the process tank.

Utilization

- Ideal for furnace heating at low temperatures up to 600°C.
- To satisfy the unique needs of each customer, a large variety of lengths, voltages, and powers are available.
- Easy and inexpensive to install.
- simplicity in upkeep and repair.
- Non-polluting and versatile.
- Energy-efficient because the solution contains all of the heat produced.

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Edge Wound Heaters

NOBLEHEAT heater manufacturer that has created a unique edge wound heater, also referred to as a bayonet heater. When maximum power is needed in a constrained amount of area, edge wound elements are employed. These components are used to convert gas-fired furnaces to electric heating systems and take the place of rod elements in furnaces that need additional power. These heating components are used in a variety of furnaces to suit their heating needs, including roller hearths, pits, batch furnaces, low temperature aluminum tempering furnaces, and high temperature exothermic gas generators. These heaters are based on an 80/20 or 70/20 nickel-chromium alloy. It provides high wattage in a constrained space and maximizes the element's surface area radiation.

Technical Details

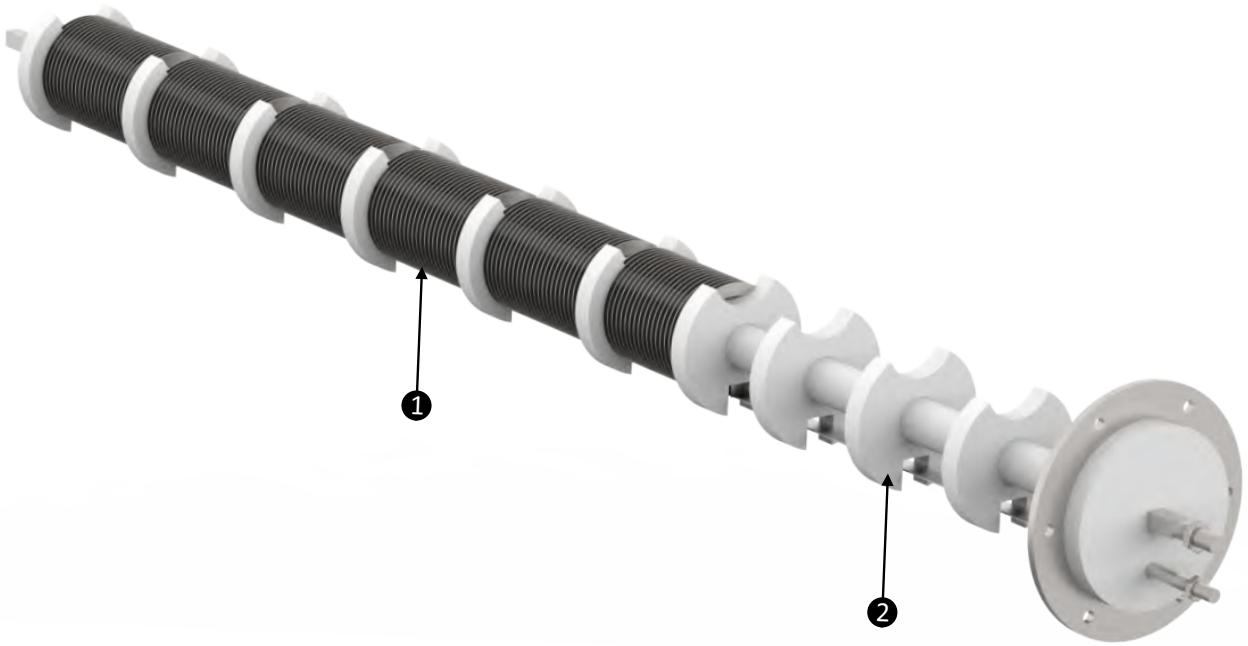
Heating Element Material	NiCr alloy (80/20 or 70/30)
Wattage	65 kW
Max. Temp.	1950°F (1050°C)
Length	Customized

Benefit

- increased density of power.
- Installing, replacing, and installing are simple.
- long lifespan in any temperature.
- either vertical or horizontal mounting.

Construction

1. Ferritic alloys such as FeCrAl and Nichrome 80:20 are heated.
1. A maximum diameter of 160 mm.
2. High resistance edge bending strip wound on high aluminum ceramic bobbins in coil shape.



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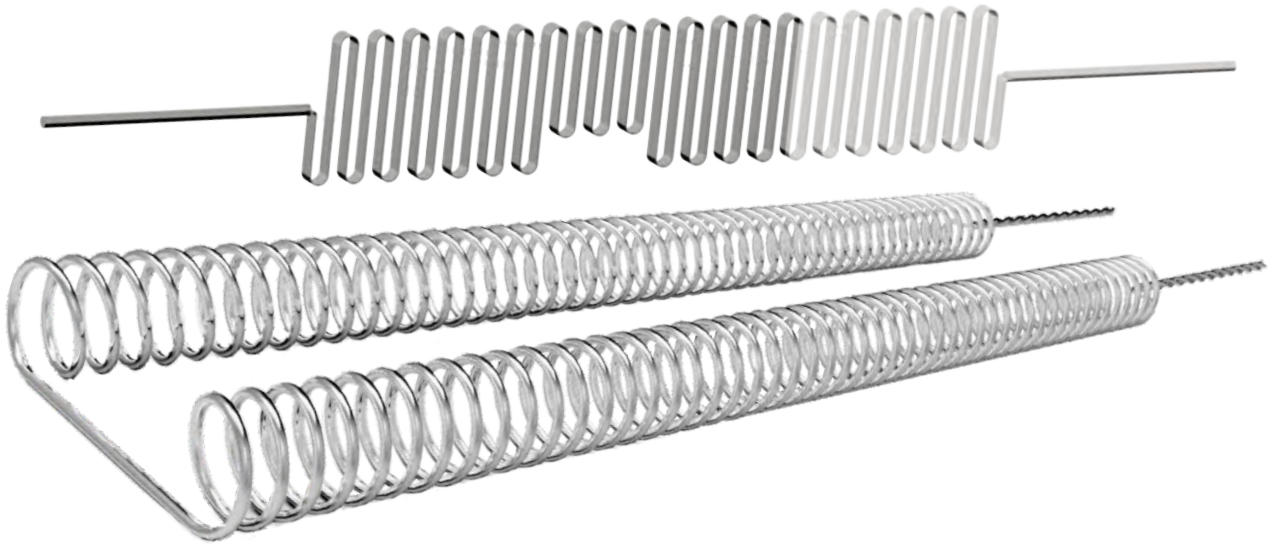
OPEN COIL & SINUSOIDAL STRIP :

Heating elements are open circuits that heat the medium directly. They are made of coiled resistance wire or strip (typically made of ferritic alloys FeCrAl or Ni-Chrome alloys) that is connected onto a supporting insulation body, such as ceramic tube, ceramic fiber board, insulation refractories, etc. These elements, which are regarded as the most effective, adaptable, and financially viable heating solution, have quick heat-up times due to direct heat transfer to objects via radiation without the need for an insulating layer. This increases productivity and is made with low-maintenance, low-cost replacement parts. The wire emits heat when an electrical current is applied to it.The wire is attached to the control panel, which fills the air handling unit's tunnel and controls how much heat the electric heater produces. It is recommended to utilize SSR or SCR switching devices due to their low bulk and quick response time. They act as a covert way to reduce the need for watt density and stop the degradation of heat-sensitive products. With the option of dispersed wattage, the heater can be shaped into a small, coiled nozzle heater that provides heat in all directions.



Technical details.

Heating Wire/Strip	Ni-chrome Alloys or Ferritic Alloys FeCrAl
Watt Density	Up to 5 W/cm²
Operating Temperature	Up to 1100°C
Length	Customize
Controls	SSR/ SCR/Relays/RTD
Terminations	Customized
Fixing	Mount on ceramic tube, ceramic fiber board or insulation refectories.

Applications.

- Direct furnace heating application
- Muffle furnaces application
- Air heating
- Heating in a vacuum environment

Benefit.

- Fast heat up time
- Low maintenance cost and easy replaceable
- Low cost because of no need extra accessories.

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